

Fact Sheet :

National Weather Service - Winter Weather

The National Weather Service mission:

The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. The NWS is the sole United States OFFICIAL voice for issuing warnings during life-threatening weather situations.

Hazardous Winter Weather Impacts

- On average, 47 people in the United States lose their lives each year due to Winter Storms. This ranks number four on the list of storm related fatalities behind flooding, lightning and tornadoes.
- Bitterly cold weather has resulted in 26 fatalities, each year on average in the United States. This is nearly twice the number of people that die from hurricanes in this country.
- About 70% of the people that are killed or injured due to winter storms are in automobiles. About 25% of the people that are killed or injured in winter storms are caught out in the storm with no place to take shelter.
- Many deaths and injuries are *indirectly* related to winter weather occurrences that are not classified as winter storms. These include:
 1. Traffic accidents on hazardous roads
 2. Heart attacks from shoveling snow or other outdoor activities
 3. Hypothermia from prolonged exposure to cold
 4. Frostbite
 5. Avalanches

Central Illinois Winter Weather Warning Statistics

- Since 1998, nearly **85%** of all winter weather storms (heavy snow and significant icing) in central Illinois have had advance warning by the NWS in Lincoln, with an **average lead time of 15.4 hours**.

Interesting Winter Weather Facts

- In the Midwestern U.S., Marquette, Michigan is the snowiest city, with an

average annual snow accumulation of nearly 130 inches! In central Illinois, the town of Minonk (northeast Woodford county) has the highest average annual snowfall with 27.1 inches.

- The biggest snowstorm to affect central Illinois occurred from December 18-20, 1973 when 14 to 22 inches of snow was measured along and just south of I-72. The highest total was in Paris, IL (Edgar county) which had 21.5 inches of snow.
- In the Midwest, it usually takes about 13 inches of snow to yield one inch of water. This ratio can change from storm to storm. “Dry” snow that is accompanied by very cold temperatures may take as much as 25 inches of snow to yield an inch of water, while “wet” snow from weather systems that originate near the Gulf of Mexico can produce 4 inches of snow for every inch of water.
- The coldest temperature to be recorded in the state occurred in the central Illinois town of Congerville (Woodford county) when the mercury dipped to -36° F on January 5, 1999.
- The coldest temperature ever recorded in the continental U.S. was -70° F in Rogers Pass, MT. Alaska’s coldest reading was -80° F at Prospect Creek. The world record coldest temperature was -129° F at the South Pole.

Economic Impacts of Weather Forecasts & Warnings

- 33% of the United States Gross National Product (GNP) is affected by National Weather Service (NWS) forecasts.
- Economists have estimated that improved *El Nino* forecasts have resulted in annual savings of nearly \$300 million for U.S. agriculture by altering planting decisions.
- A 1 degree Fahrenheit improvement in temperature forecasts could decrease the annual cost of electricity by at least \$ 1 billion.